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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,879	12/31/2003	Michael E. Browne	POU920030116US1	8880
46369	7590	11/25/2008		
HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE ALBANY, NY 12203			EXAMINER LIE, ANGELA M	
			ART UNIT 2163	PAPER NUMBER
			MAIL DATE 11/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,879	<b>Applicant(s)</b> BROWNE ET AL.	
	<b>Examiner</b> ANGELA M. LIE	<b>Art Unit</b> 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Status of claims

1. Claims 8-20 are pending.
2. Claims 1-7 are canceled.
3. Claims 8-20 are rejected under 35 U.S.C. 102(b).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 8-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiell et al (US Patent No. 6119222), hereafter referred to as Shiell.**

**As to claims 8 and 15**, Shiell discloses a request management system comprising: a computer environment (Figure 1); means for receiving by a request associated with meta data ( Figure 1, element 306), the meta data corresponding to data stored and maintained separately from the meta data by a data object manager of a storage subsystem of the computer environment and the meta data being information about the data itself (column 2, lines 3-15, wherein BTB (branch target buffer) stores information pertaining to each instruction previously executed); means, responsive to receipt of the first request at the requester manager, for processing the meta data associated with the first request for automatically informing, by the request manager,

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the data object manager of an anticipated, second request to be subsequently received by the data object manager from the requester to enable the data object manager to prepare for the anticipated second request (column 2, lines 3-22, wherein once the first instruction/request is executed the consecutive instruction can be predicted based on the prediction code/meta-data stored in BTB), prior to receipt thereof, wherein that anticipated, second request to be received by the data object manager is at least partially ascertained from processing the meta data associated with the first request received by the request manager (wherein the prediction meta-data is accessed and analyzed prior to execution of the consecutive instruction/request); and wherein the data object manager prepares for the anticipated, second request by adjusting utilization of a cache of the computer environment based on information derived from the meta data associated with first request by the request manager before the anticipated, second request is received at the data object manager from the requester (column 3, lines 19-30, wherein appropriate data is pre-fetched prior to receiving second request/instruction in order to prevent latency associated with wait to fetch needed data once the instruction is received).

**As to claims 9 and 16,** Shiell discloses the system wherein the data object manager prepares for the anticipated, second request by at least one of pre-fetching into the cache data required by the anticipated (column 3, lines 19-30), second request, thereby reducing data access latency, or moving data from the cache to a disk of the storage subsystem, thereby facilitating receipt of data at the cache.

**As to claims 10 and 17,** Shiell discloses the system wherein the preparing comprises the means for managing contents of a cache in a data storage subsystem, wherein the data object manager prepares for the anticipated, second request by noting that data associated with the anticipated, second request is not to be cached (column 13, lines 1-16, wherein if data is already loaded in the cache, there is no need to pre-fetch (i.e. cache it) it again).

**As to claims 11 and 18,** Shiell discloses the system wherein the data object manager prepares for the anticipated second request by managing the requester's access to the data (column 3, lines 19-30, wherein once data is pre-fetched it allows for faster access if a requester desires to utilize the data, thus it manages the requester's access to the data).

**As to claims 12 and 19,** Shiell discloses the system further comprising: means for sending, by the request manager, a reply to the requester in response to the first request substantially simultaneously with informing the data object manager of the anticipated, second request to be received (column 1, lines 25-30); and means for thereafter receiving, by the data object manager, the second request from the requester, wherein the preparing by the data object manager begins before the data object manager receives the anticipated, second request (column 2, lines 3-22).

**As to claims 13 and 20,** Shiell discloses the system wherein the pre-fetching comprises means for pre-fetching one or more data blocks from one or more storage media of the data storage subsystem whereby the data blocks are stored in the cache,

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the data blocks comprising at least some of the data (column 3, lines 19-22 and column 11, lines 24-27).

**As to claim 14,** Shiell discloses the system wherein the preparing by the data object manager comprises means for releasing storage locations of the cache, whereby the storage locations become available for storing other data (column 2, lines 45-57, wherein there are multiple levels of the cache (i.e. level 0, 1 and 2 etc, considered storage locations), furthermore all of the available cache levels at one point in time are available for storing data, since cache stores instructions and data needed to their execution only temporarily).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 8 and 15 have been considered but are moot in view of the new ground of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Inquiry***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA M. LIE whose telephone number is (571)272-8445. The examiner can normally be reached on M-F.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela M Lie/  
Examiner, Art Unit 2163

/don wong/

Supervisory Patent Examiner, Art Unit 2163